## Colorado River Storage Project Flaming Gorge Working Group Meeting Minutes April 19, 2007

## **Participation**

This meeting was held at Western Park, Vernal, Utah. Attendees are listed below.

## **Purpose of Meeting**

The purpose of operation meetings (held in April, and August) is to inform the public and other interested parties of Reclamation's current and future operational plans and to gather information from the public regarding specific resources associated with Flaming Gorge Reservoir. In addition, the meetings are used to coordinate activities and exchange information among agencies, water users, and other interested parties concerning the Green River.

#### General

Brent Rhees called the meeting to order at 10:05 a.m. with 31 present (see signup sheet for attendance). Brent introduced himself and indicated that the proposed 2007 spring and base flow releases from the Flaming Gorge Technical Working Group (FGTWG) would be presented by Peter Crookston, followed by this year's hydrograph analysis and forecast presented by Rick Clayton and then an open discussion and questions. Before starting with Peter Crookston's presentation, all present introduced themselves and their affiliations.

## FGTWG 2007 Flow Proposal - Peter Crookston

Peter Crookston then gave a presentation on the proposed FGTWG flow and temperature recommendations for 2007 (see presentation posted on web site). He provided some background on the FGTWG establishment by the Record of Decision and also reviewed the 3 reaches of the Green River, the 1992 Biological Opinion, and the 5 hydrologic classifications (wet, moderately wet, average, moderately dry, and dry). He then presented the FGTWG proposal for the different forecast classifications.

This year we are currently in the moderately dry classification. If this year remains in the moderately dry classification, the proposal is to achieve 4,600 cfs (powerplant capacity) in Reach 1 timed during the peak and post peak flows of the Yampa River with the duration necessary to achieve the duration target in Reach 2. The proposal is to achieve 8,300 cfs at the Jensen gauge in Reach 2 for 7 days (these don't have to be consecutive days). In the moderately dry classification the proposal is to achieve this Reach 2 level at a minimum (8300 cfs for 7 days). Additionally, the FGTWG proposes that if 14,000 cfs is achieve in Reach 2 at any point during the peak, that flows should be sustained at or above this level for as long as reasonably possible. Also, if flows do not reach 14,000 cfs but do achieve 12,000 cfs in Reach 2 and observations in the field by the Fish and Wildlife Service and Reclamation indicate sufficient connectivity to the floodplain when razorback larval are present, the flows should be sustained for as long as reasonably possible at these lower levels. Bypass is not being asked for under this moderately dry scenario. We are asking for powerplant releases only to be sustained and this is an effort to assist in floodplain connectivity and entrainment of razorback sucker larvae. (The ROD calls for a full powerplant capacity release in every year during the Yampa peak. The question this year is

how long should the duration be. Our proposal attempts to provide guidance to Reclamation for how long this duration should be.)

If conditions become dryer this year and we move into a dry classification, the proposal is to achieve 8,300 cfs in Reach 2 for 2 days. If conditions become wetter, which is unlikely with the latest forecast, and we move into the average classification, flows in Reach 2 should be managed to the extent possible to achieve at least 8,300 cfs for 7 days in 50% of all average years and 18,600 cfs for at least 14 days in 25% of average years and 18,600 cfs for at least 1 day in 25% of average years. These flows should be achieved during the peak and post peak flows of the Yampa River.

If conditions become even wetter, a proposal for a moderately wet year is proposed but it is highly unlikely to occur. Under this scenario flows in Reach 1 should be managed at powerplant capacity (4,600 cfs) for the duration necessary to achieve the duration target in Reach 2. The target for Reach 2 would be managed to achieve 20, 300 cfs for at least 1 day in 50% of all moderately wet years and 18,600 cfs for at least 14 days in 50% of all moderately wet years. Both of these flow objectives would be achieved during the peak and post peak flows of the Yampa River.

After the spring flow objectives in Reach 1 and Reach 2 have been achieved, flows should be gradually reduced to achieve base flow levels by no later than July 1, 2007. Base flows in Reach 1 and 2 should be managed to fall within the prescribed base flow ranges described in the 2000 Flow and Temperature Recommendations. If we remain in the moderately dry classification the base flow objective would be 1,100 cfs to 1,500 cfs in Reach 2.

The temperature of flows should be managed to be at least 18 degrees Celsius for 2 to 5 weeks in Upper Lodore Canyon during the beginning of the base flow period. Water temperatures in the Green River should also be managed to be no more than 5 degrees Celsius colder than those of the Yampa River at the confluence of the Green and Yampa rivers for the summer (June through August).

On May 24th Reclamation initiated a bypass for 24 hours to achieve the one day target of 18,600 cfs. We actually balanced the bypass release by partially opening both bypass tubes. We hit 18,900 cfs at Jensen on May 24 th and hit it again on May 25 th. The second peak was the result of an unexpected heavy rain event in the upper Yampa River basin. Overall the inflow to Flaming Gorge reservoir ended up being below the minimum probable statistic and we are now in a moderately dry scenario.

When the Flaming Gorge Technical Working Group (TWG) met in July we recommended a base flow target of 1230 cfs in Reach 2 at Jensen. Due to the now dry condition and low flow of the Yampa River we are now at 1000 cfs base flow in Reach 2. As the summer cools and irrigation decreases next month we should see an increase of 100 cfs in the Yampa River. Rick ended his presentation by laying out the schedule for the TWG and the Flaming Gorge Working Group (FGTWG) to recommend the 2007 spring and base flow releases. The goal now is to have the reservoir at 6027 feet elevation by March 1 st and from there we look at the weather forecast to formulate a recommendation.

### **Hydrology Presentation - Rick Clayton**

Rick Clayton then gave his presentation on this year's hydrology analysis and forecast (see presentation posted on web site). Rick began with a summary of what occurred in the past and where we are now and then the forecast. He said we are in the return to normal operation right now at Flaming Gorge Dam. The reservoir elevation will be 6027 by May 1st and will be relatively steady. Double peaking occurred from December 15th to the end of February. March was pretty active this year and slightly above normal because of warm temperatures.

The 2005 unregulated inflow was 101% of average and in 2006 it was 66% of average. Right now our forecast is constantly below normal with a snowpack at 63% of average. The Snotel sites for both the upper Green River basin and the upper Yampa River basin are tracking well below normal. 2002 was the worst year for the Yampa River basin. Rick reviewed snowpack, forecast, and dry, average and wet scenarios, taking both the Yampa and Upper Green into account.

Rick explained that right now according the Green River April final forecast we are in the lower half of the moderately dry classification and there is a 10% chance we could move down into the dry classification and there is a 10% change we could move up into the average classification. This is similar to the Yampa River April final forecast. Rick reviewed the flow objectives for moderately dry years, dry years, and average years. He further explained the FGTWG's request to maintain spring flows if reasonably possible at 14,000 cfs flows or 12,000 cfs to maintain connectivity with flood plain depressions. This is important if razorback larvae are in the river. His contact person to relay information from the field will be Tom Chart with the Fish and Wildlife Service. Rick reviewed the base flow objectives under the dry, moderately dry, and average classifications and the flow temperature objectives. The FGTWG will meet after the spring and determine the appropriate base flow target based on the hydrology.

Rick ended his presentation with an explanation of the 4 step process now in effect for arriving at the final decision on spring and base flow releases. First, if the Recovery Program has any plans to request special flows for research purposes, these need to be conveyed to the FGTWG (The Recovery Program did not have any request for specific flows this year). The FGTWG convenes and reviews snowpack, hydrology forecasts, and any Recovery Program requests, and comes up with proposed releases for spring peak and base flow. That proposal is then shared with the FG Working Group as we are doing today so that we can receive feedback from the interested public and learn of any other resource issues that should be factored into the decision. Then, Reclamation reviews all of this information and arrives at a final decision. Rick Gold or his acting is the decision maker. Since the forecasts are subject to further change all the way to the start of peak runoff, Reclamation's decision is subject to further refinement as needed.

#### **General Discussion - Brent Rhees**

Brent Rhees then asked if anyone had questions from either presentation by Peter Crookston or Rick Clayton. The question was asked to Rick if a double peak release would be requested this summer from Western. He responded that Western does not normally ask for double peaking in the summer because the increase electrical demand that relates to specific times of the day does not occur in the summer. It is normal for Western to ask for winter double peaking because of this demand.

Dee Holladay asked when the Yampa River is at its peak flow? Rick said on average the peak comes on May 23rd and added that he thinks it could come 2 weeks early this year but in reality the Yampa River can peak anytime from April to mid June.

Rick asked that everyone submit comments on the FGTWG proposal within the next 7 days and comments should be submitted to Ed Vidmar at evidmar@uc.usbr.gov.

Dee Holladay asked what the minimum flows will be in July. Rick responded that 800 cfs is the minimum and Reclamation does not generally go below that. Rick said if you ever see it go below 800 cfs please call me. Dee said they would never want to see it below 800 cfs either.

Dennis Breer said this spring Reclamation did a "black restart" at the Flaming Gorge Power Plant a couple of weeks ago. The river below the dam totally dewatered and then the river came way back up again. It was not anticipated by anyone and there were public right below the dam. In the past Reclamation gave a warning when it was going to occur. In the future could Reclamation do it at a better time, a time when fewer people are on the river? Bill Schwartz said a "black restart" is required periodically. To do a "black restart" all of the flow is shut off for a second and then restarted immediately. It was conducted at 8:00 a.m. and the river gauges showed no more than a ¾ of a foot difference in elevation of the water surface of the river. Reclamation will try to let Dennis and others know when it is going to occur in the future.

Brian Raymond asked how we get to a moderately dry classification. Rick Clayton responded that we use the forecast for the Green River to determine the classification and that is upgraded each month and can change as we move closer to spring runoff.

Dennis Breer commented that last fall Western presented a proposal to double peak during the winter. Rick Clayton's last slide shows a 4 step process for coming to a decision and Dennis felt that process was never followed by Reclamation. Dennis said that double peaking proposals should be made in the Working Group and the group given time to comment. Dennis stated that he was dissatisfied with the process and that Reclamation gave lip service to a request to study the double peak flows by collecting baseline data first and then went ahead and double peaked without studying it. A lot of finger pointing went back and forth between Western and DWR and then Reclamation went ahead with the double peaking and did not consult with us. Dennis said we missed a great opportunity to study the double peaks. In the future, if we are gong to double peak we need to talk about it in advance. Peter Crookston and others recalled that at the last Working Group meeting in August Ed Vidmar said that double peaking was likely to occur this winter.

Dennis Breer said that every year Western over commits with contracts for power and then when they fall short they come to Reclamation and say they need the power from Flaming Gorge and they need a double peak release pattern to deliver that power. This happens every year. My sales books show the significant impact double peaking has on Recreation. I have not got cooperation from Western or Reclamation on this issue. This group should have an opportunity to comment on double peaking. Peter Crookston asked Dennis if he could provide data showing the significant impact double peaking has on Recreation. Dennis said he would provide the data.

Rick Clayton indicated that in the future in order for Reclamation to have adequate time to make their decision regarding double peaking the request must come in earlier. This past year the request came on November 20th requesting a December 1st starting date.

Ted Rampton said we are interested in the double peak study data as well. We need to have data to evaluate the impacts.

Roger Schneidervin said we also wanted the data Dennis is talking about. We wanted at least one more year of baseline data before double peaking was initiated. We have been working with Argonne and Western in adjusting the model to study these effects and we feel good about where the study is going now. We feel double peak flows are not natural for the river and in general that is where we are coming from. Roger said that Mark Vinson (Utah State University) believes he will see impacts at the aquatic invertebrate level first before it is detected in the fish and that is why his studies are so important. In the perfect world we would have more years of baseline date without double peaking and then look at double peaking impacts. Going into this study our comfort level was low but we now feel good about its direction. Western purchased pit tags so we could mark fish and determine individual growth rates and body condition which strengthens the model. We recovered 10% to 11% of previously tagged fish and that is a good recovery rate. Lowell Marthe added that now with the pit tagging we can look at individual growth rates. John Hayse is now working on the condition of the fish. This was difficult to do without individual growth rates. John Hayse said Western and DWR are working together well and we have a draft study plan put together that we all can agree on. When the draft plan is in place with just a few more edits we will put it out for this group to comment on.

Lowell Marthe stated that funding is the biggest problem for us. We need reliable funding sources. This can go a long way to ensure reliable consistent data.

Brian Raymond commented that he is interested when the fish start to feed again after a double peak flow release. How long is that lag time and how far did the fish move as a result of double peaking? This lag time impacts the fisherman and consequently our businesses. Most of our business is closely tied to fishing like lodging and rental revenue. We are a small county (Daggett County) and of our 220 businesses, 100 are fishing guides, lodging, and fly shops. The EIS was very flawed in its economic analysis when it grouped all three counties together and assumed they would all absorb the impacts of implementing the new flow recommendations (2000 Flow and Temperature Recommendations). It also assumed that negative impacts to river recreation would be made up or offset by the positive effects to lake recreation and that is not how it works. They are very different resources and river fisherman will not just change their fishing habitats because of impacts to the river and go try fishing on the lake. They are two totally different kinds of fishing. We get ignored because we are a small county and this has real impacts on our county. One other comment, as soon as the email goes out to us the internet should be updated so they reflect the same information. It seems like a week or so goes by before the internet information is updated. Rick responded that is a real issue and he will get that information to the internet sooner. Rick said this updated information Brian is talking about is on the current status page on Reclamation's site.

## **Next Meeting**

Brent Rhees thanked everyone for their comments. Peter Crookston agreed to allow everyone an opportunity to review the meeting notes by email before they are put on the internet. Brent added that if they didn't make comments today this is another opportunity for them to comment on the FGTWG proposal. Brent announced the tentative date for the next Flaming Gorge Working Group meeting will be Thursday, August 23, 2007, at 10 a.m. at Western Park in Vernal.

#### **Presentations**

Flow Proposal Presentation April 2007

http://www.usbr.gov/uc/water/crsp/wg/fg/pdfs/FGTWG\_Apr07.pdf

Hydrology Presentation April 2007

http://www.usbr.gov/uc/water/crsp/wg/fg/pdfs/FlamingGorgeWorkGroup\_Apr07.pdf

## **Previous Meeting Minutes**

Flaming Gorge Working Group Meeting Minutes:

August 22, 2006

April 13, 2006

November 2, 2005

October 28, 2005

August 25, 2005

April 20, 2005

August 19, 2004

April 15, 2004

# **Attendees:**

Name	Organization	Telephone Number
Ted Rampton	UAPMS	801.566.3938
Kevin Clegg	Flaming Gorge Resort	435.790.4822
Dennis Breer	GROGA	435.885.3355
Peter Crookston	Reclamation	801.379.1152
Brian Raymond	Daggett County	435.784.3218
Melissa Trammell	NPS	801.741.1012
Rick Clayton	Reclamation	801.524.3710
Dave Klein	Reclamation	435.885.3106
Billy Elbrock	Reclamation	435.885.3106
Dave Irving	USFWS	435.789.4028x17
Sam Haslam	Rancher near Jensen, UT	435.789.1947
Ed Clark	CBRFC	801.524.5130
Clayton Palmer	WAPA	801.524.3522
William Conroy	Ashley National Forest	435.781.5278
Alex Gouley	Ashley National Forest	
Lowell Marthe	Utah DWR	435.885.3164
Roger Schneidervin	DWR	435.781.5314